

AMENDMENT TO THE SPECIFICATION

Please insert the Sequence Listing consisting of 4 sheets, provided herewith, into the application. The Sequence Listing is provided, as required, to comply with the requirements of 37 C.F.R. § 1.821 through 1.825. I hereby submit that the Sequence Listing contains no new matter.

In the Specification:

Please amend the specification on page 16, line 17, through page 17, line 4, to read as follows:

Assay of the truncation mutants proved to be a sensitive and specific screen for the identification of the MAD2/ER beta interaction domain. The interaction domain was identified as encompassing amino acids ~~nucleotides~~ 516 to 622 ~~of ER-beta~~ (Fig. 3A). Fig. 3B summarizes the two hybrid protein interaction results. As is shown in Fig. 3B, the ER beta/MAD2 interaction domain is defined by amino acids ~~nucleotides~~ 516 to 641 ~~of ER-beta that interact with MAD2~~ clone EC1. Fig. 3B also shows that slightly larger regions, containing the interaction domain, support the interaction between ER beta and MAD2, while fragments lacking the nucleotides 516-622 amino acid domain ~~of ER-beta~~ do not.

Please amend the specification on page 20, lines 3-15, to read as follows:

Thus the GST-fusion protein experiments demonstrate that mER β is brought down, or associates with, the GST-MAD2 clone and, in the converse experiment, MAD2 is brought down by GST-mER β . Each case demonstrates the protein-protein interaction. In contrast, the results

shown in Fig. 4C indicate that while GST-mER β , as expected, brings down ER α alpha (this is a positive control since it is known that these two proteins heterodimerize), GST alone, or GST MAD2, shown in the third and fourth lanes, respectively, do not bring down ER alpha ~~ER α~~ . This result confirms the two hybrid data, i.e. that ER alpha ~~ER α~~ does not interact with MAD2. Fig. 4D, which shows the results of protein-protein interaction studies between MAD2 and ER beta mutants, also confirms the two hybrid data which identified the MAD2/ER beta interaction domain as including amino acids ~~nucleotides~~ 516-622 of ~~ER beta~~. Other experiments indicate that MAD2 does not interact with RAR or RXR (two steroid hormone families members), further underscoring the specificity of the MAD2/ER beta interaction.